

ABSTRACT OF THE DISCLOSURE

A rocket motor ablative material (*e.g.*, an insulation liner, bulk material, or the like) of this invention is formed from, as a precursor of the carbon reinforcement structure, one or more polyarylamides configured as a suitable reinforcing structure, such as a yarn, flock, and/or felt. Aramid yarns can be prepared by twisting/spinning aramid filaments, and/or by carding and yarn-spinning staple aramid fibers. In particular, the insulation may be used, for example, for a rocket motor nozzle or as a rocket motor heat shield subjected to conditions comparable to those of continuous filament viscose rayon.